

ELAR 216 Panel™

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1. GENERAL INFORMATION

INTRODUCTION: Congratulations, you have just purchased one of the most innovative and reliable LED fixtures on the market today! The ELAR 216 Panel™ has been designed to perform reliably for years when the guidelines in this booklet are followed. Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this unit. These instructions contain important information regarding safety during use and maintenance.

UNPACKING: Thank you for purchasing the ELAR 216 Panel™ by Elation Professional®. Every ELAR 216 Panel™ has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for damage and be sure all accessories necessary to operate the fixture have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Inside the box you should find: the fixture, a IP rated power cable, IP rated DMX cables (in and out), a safety cable, and this manual. Please do not return this unit to your dealer without first contacting customer support at the number listed below.

CUSTOMER SUPPORT: Elation Professional® provides a customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.elationlighting.com for any comments or suggestions. For service related issue please contact Elation Professional®. Service Hours are Monday through Friday 9:00 a.m. to 5:00 p.m. Pacific Standard Time.

Voice: (323) 582-3322

Fax: (323) 832-9142

E-mail: support@elationlighting.com

Forum: www.ElationLighting.com/forum

Warning! To prevent the risk of fire and reduce the risk electrical shock, do not attempt to operate this fixture with the lens cover removed.

Caution! There are no user serviceable parts inside this unit. Do not attempt any repairs yourself. Doing so will void your manufactures warranty.

Please do not discard the shipping carton in the trash. Please recycle whenever possible.

WARRANTY REGISTRATION: The ELAR 216 Panel™ carries a two-year (730 days) limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support at (323) 582-3322.

2. SAFETY INSTRUCTIONS



To guarantee proper and consistent operation, it is important to follow the guidelines in this manual. Elation Professional will not accept responsibility for damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual.

1. Always be sure that the fan and the air inlets remain clean and are never blocked. Allow about 6" (15cm) between this fixture and other devices or a wall to allow for proper cooling. See page 12.
2. Never touch the fixture during normal operation.
3. Never look directly into the light source. You risk injury to your retina, which may induce blindness.
4. For safe operation, follow the Installation guide described in chapter six of this manual. Operating the ELAR 216 Panel™ without suited safety aids such as safety cables or clamps can increase the risk of damage and/or personal injury.
5. Qualified and certified personnel should only perform installation.
6. When mounting this fixture, use only the original rigging points included with this fixture. Any structural modification will void the original manufactures warranty and may increase the risk of damage and/or personal injury.
7. Do not attempt to operate this fixture if the power cord has become damaged or frayed.
8. **Never open this fixture while in use.**
9. This device falls under protection-class I. Therefore it is essential that the device be grounded properly.
10. Qualified personnel should perform all electrical connections.
11. Be sure the available voltage matches the voltage requirements of the unit. Be sure the power cord is never crimped or damaged. If the power cord is damaged, replace it immediately with a new one of similar power rating.

12. Always disconnect from main power before performing any type of service or any cleaning procedure.
13. Only handle the power cord by the plug. Never pull out the plug by tugging the wire portion of the cord.
14. ***Please be aware that damages caused by modifications to the device are not subject to warranty.***

Important Notice: Damages resulting from the disregard of safety and general user instructions found in this user manual are not subject to any warranty claims.

3. FEATURES

- IP65 Rated Fixture
- Low power consumption
- Minimal heat emission
- Maintenance free operation
- Equipped with 72 3-Watt (18 x red, 18 x green, 18 x blue, 18 x white)
- Silent Operation, convection cooled, no fans
- 100,000 hours ***rated*** LED life
- Linear RGBW Color Mixing, infinite color possibilities
- 10° Beam Angle/22° Field Angle
- USITT DMX-512 Complaint
- Preprogrammed colored macros
- Strobe-effect with a maximum flash rate of 25fps
- DMX-controlled operation or stand-alone operation with Master/Slave-function
- 7 built-in programs can be called up via DMX-controller
 - ~ 48 preprogrammed scenes per program
- Sound-controlled via built-in microphone
- Four DMX Modes:
 - 4 DMX channels
 - 5 DMX channels
 - 7 DMX channels
 - 9 DMX channels
- DMX-control via standard DMX-controller
- Upgradable firmware via Elation “E-Loader” Data Pack
- Electronic Switching Power Supply 100v~240v
- Flicker-free operation for television and film
- 0%~100% Dimming (two dimming options; linear & standard)

4. GENERAL GUIDELINES

This fixture is a professional lighting effect designed for use on stage, in nightclubs, in theatres, and other types of architectural installations. Do not attempt operation or installation without a proper knowledge on how to do so.

Consistent operational breaks will ensure that the fixture will function properly for many years to come.

Do not shake the fixture around. Avoid brute force when installing or operating the fixture.

While choosing an installation location, please be sure that the fixture will not be exposed to extreme heat, moisture, or dust. The minimum distance between the fixture and a wall or flat surface should be at least 0.5 meter (about 1.5ft). See page 12.

Always install the fixture with an appropriately rated safety cable. When installing the fixture in a suspended environment always be sure to use mounting hardware no less than M10 x 25 mm, also be sure the hardware is only inserted in the yoke's mounting holes.

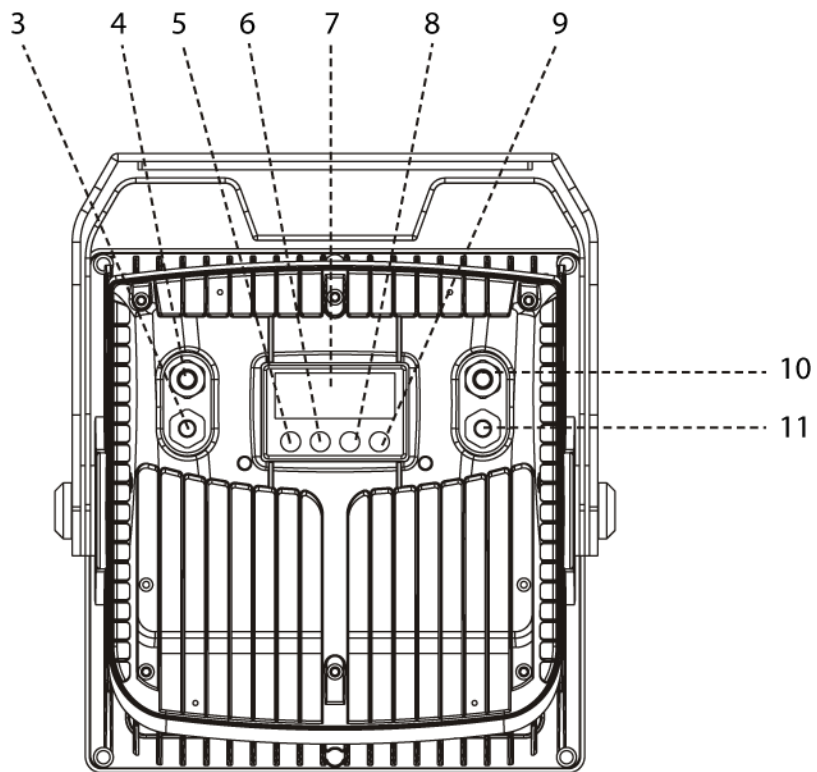
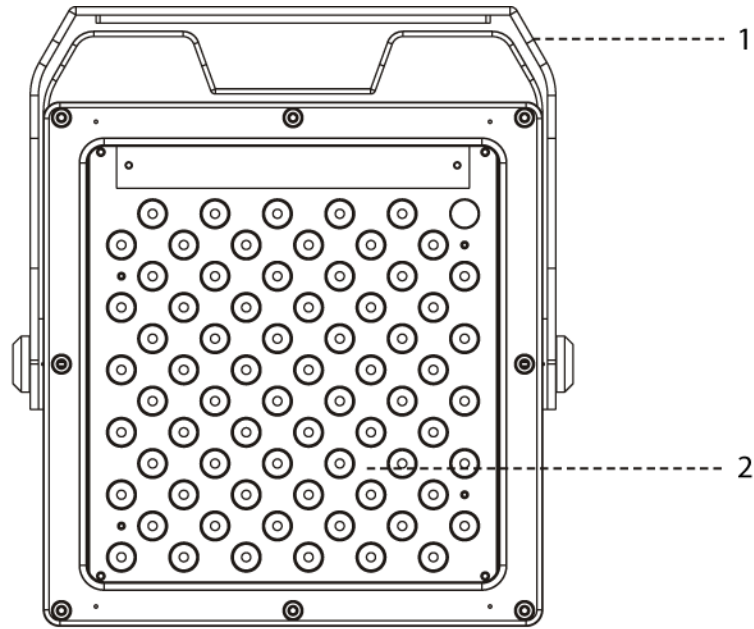
Do not attempt to operate this fixture until you have familiarized yourself with all of its functions.

Do not permit operation by persons not qualified for operating this type of architectural fixture. Most damages are the result of improper operation.

Please use the original packaging to transport the fixture in for service.

For your own safety, please read this user manual carefully before installing the device.

5. FIXTURE OVERVIEW



1. **Yoke Assembly** – This yoke is designed to perform two functions; 1) When split it can be used as a floor stand bracket. 2) Used to secure a mounting clamp for truss mounting.
2. **LED Lens Assembly** – The lens assembly may be user replaced in the event repair is needed or a different beam angle is required.
3. **DMX In Lead** – This lead is the main DMX input lead. When the unit is the first in a chain or the only fixture to be used with a DMX controller, be sure to use the DMX starter cable that converts a standard 3-pin XLR DMX connector to the IP rated twist lock connector that is used on the fixture. When jumping from fixture to fixture be sure to only use Elation IP rated DMX cables to maintain the IP rating.
4. **DMX Out Lead** – This lead is used to send an incoming DMX signal to the next fixture in the DMX chain. To maintain the integrity of the IP rating, only use proper Elation IP rated DMX cables.
5. **MENU Button** – This button is used to access the fixtures menu functions.
6. **Up Button** – The up button is used to toggle forward through the menu functions and settings.
7. **LED Display** – 4-segment menu display. Used to display the DMX address as well as all other menu functions.
8. **Down Button** – The down button is used to toggle backwards through the menu functions and settings.
9. **Enter Button** – The enter button is used to enter in to a certain menu function or to lock a menu setting in to memory.

- 10. Power Output Lead** – This lead is used to jump power to another ELAR 216 Panel™. Please do not daisy chain power for more than 16 fixtures. To maintain the integrity of the IP rating, only use proper Elation IP rated power cables.

- 11. Main Power Input Lead** – This lead is the main power input lead. When the unit is the first in a chain or the only fixture to be used, be sure to use the power starter cable that converts a standard Edison 3-prong to the IP rated twist lock connector. When jumping from fixture to fixture be sure to only use Elation IP rated power connectors to maintain the IP rating.

6. MOUNTING AND INSTALLATION

Cautions:

For added protection mount the fixtures in areas outside walking paths, seating areas, and away from areas where unauthorized personnel might reach the fixture.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

To avoid injury, never stand directly below the device when mounting, removing, or servicing the fixture.



Refer to regulations BGV C1 (formerly VBG 70) and DIN VDE0711-217 for proper installation in Europe. To ensure proper installation, only qualified staff should attempt installation.

Mounting points

Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

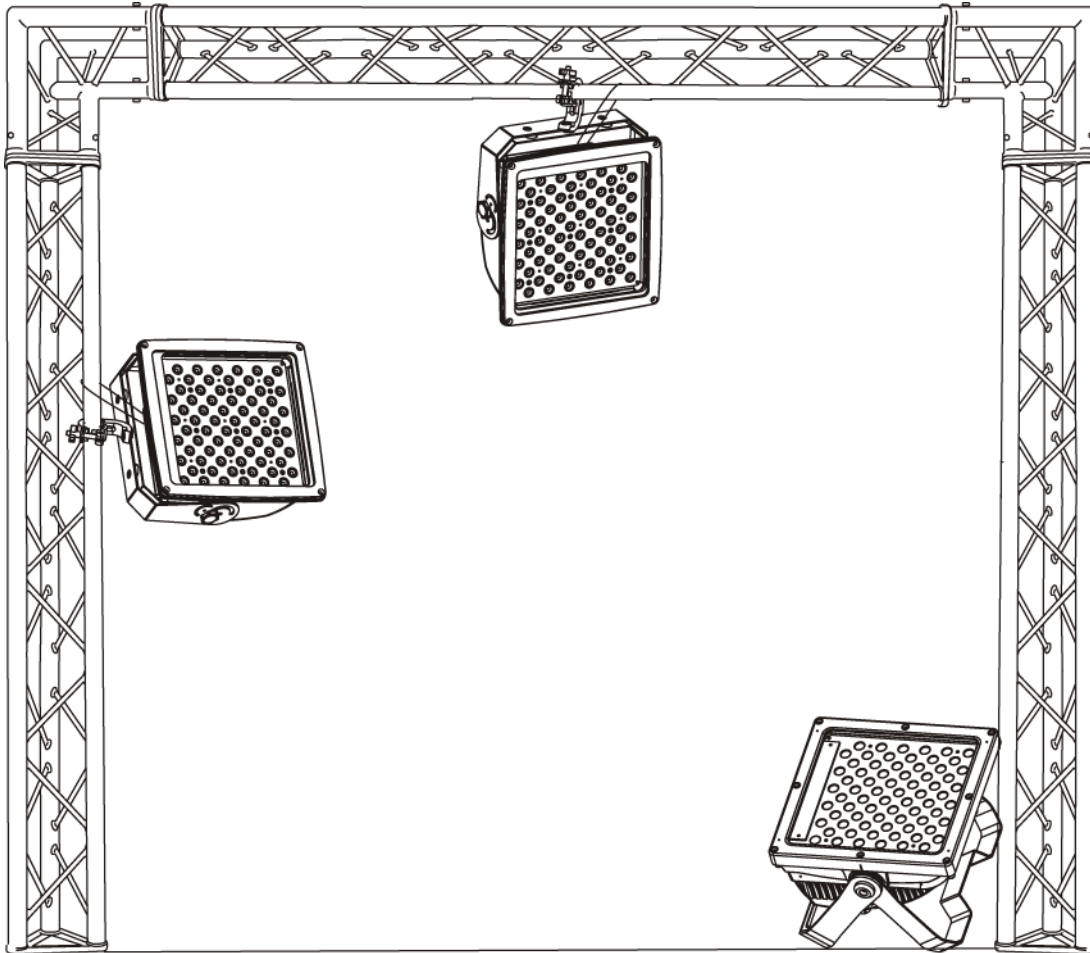


CAUTION!
Be sure a qualified electrician performs all electrical connections.

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

Mounting

The ELAR 216 Panel™ is fully operational in any mounting position, hanging upside-down, side mounted, or set on a flat level surface, etc. Be sure this fixture is kept at least 0.5m (1.5 feet) away from any flammable materials (decoration etc.). When clamp mounting; always use and install the supplied safety cable as an added safety measure to prevent accidental damage in the event of a clamp failure. **See the image below.**

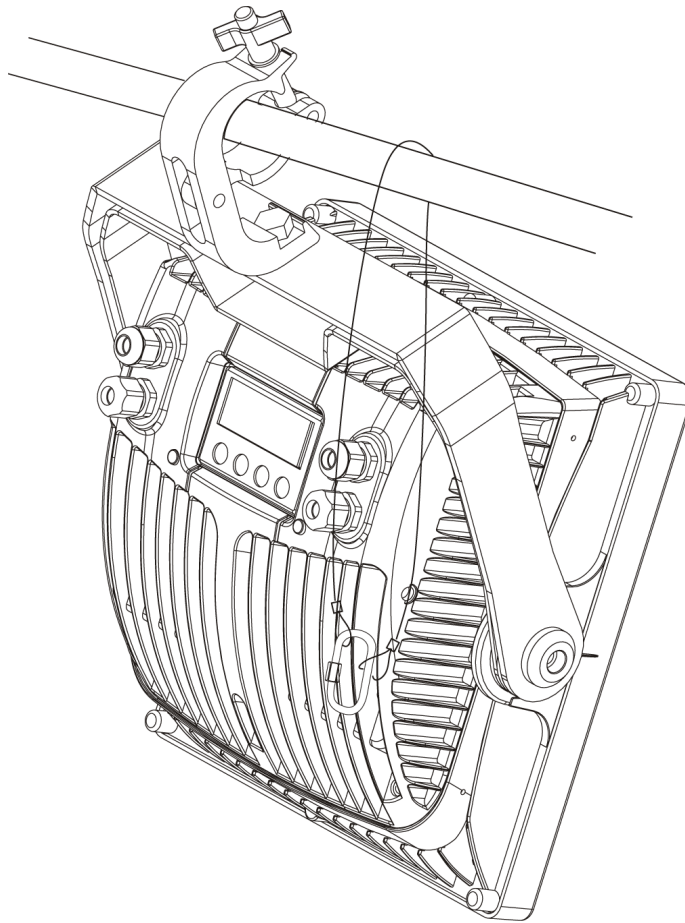


Clamp Mounting

The ELAR 216 Panel™ provides a unique mounting bracket assembly that allows the unit to stand on a flat surface or to be hung on truss via a clamp in any safe position (see the illustration above). Regardless of the mounting option you choose please be sure to refer to the safety guidelines in this manual to avoid damage to the unit and/or personal injury.

When mounting this fixture to truss be sure to secure an appropriately rated clamp to the hanging yoke using a M10 screw fitted through the center hole of the hanging yoke. As an

added safety measure be sure to attach at least one properly rated safety cable to the fixture. See illustrations below.



Securing the ELAR 216 Panel™



Always be sure to secure your fixture with a safety cable when suspending the unit from truss or other means. The fixture provides a built-in rigging point for a safety cable as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to the hanging bracket.

7. UNDERSTANDING DMX

DMX-512: DMX is short for Digital Multiplex. This is a universal protocol used by most lighting and controller manufactures as a form of communication between intelligent fixtures and controllers. DMX allows all makes and models of different manufactures to be linked together and operate from a single controller. This is possible as long as all the fixtures and the controller are DMX compliant. A DMX controller sends the DMX data instructions to a fixture allowing the user to control the different aspects of an intelligent light. DMX data is sent out as serial data that travels from fixture to fixture via data “IN” and “OUT” leads located on the fixtures (most controllers will only have output jacks).

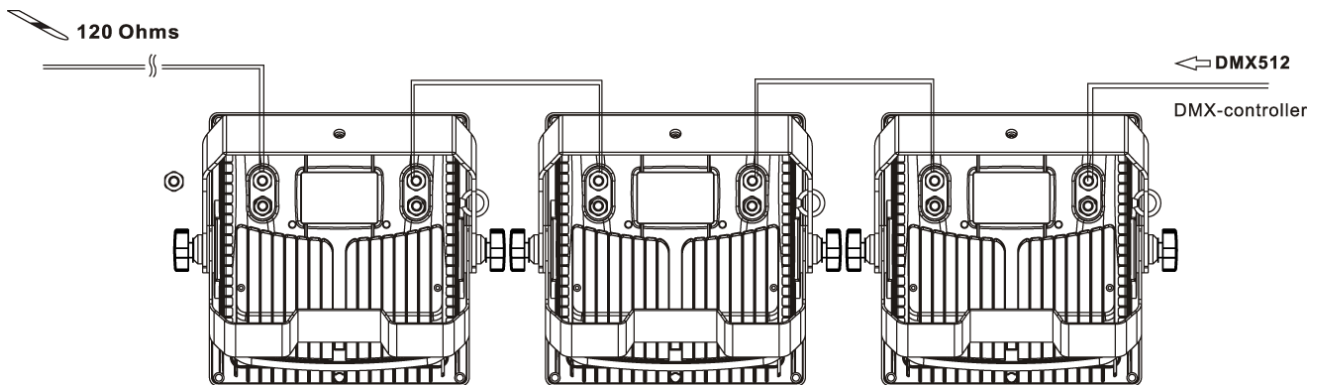
DMX Linking: To ensure proper DMX data transmission, always use proper DMX cables and a terminator. When using several DMX fixtures try to use the shortest cable path possible. Never split a DMX line with a “Y” style connector. The order in which the fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned a DMX address of 1 may be placed anywhere in the DMX chain, at the beginning, at the end, or anywhere in the middle. The DMX controller knows to send data assigned to address 1 to that fixture no matter where it is located in the DMX chain. The ELAR 216 Panel™ can be controlled via DMX-512 protocol. The ELAR 216 Panel™ is a fixture that can operate in 4, 5, 7, or 9 DMX channels (see pages 28-30 for the different DMX channel values). The DMX address is set electronically using the controls on the LED menu.

Cable Requirements: This fixture is designed with special cables for both DMX and power. These cables are specifically designed to maintain the integrity of the IP rating. When using this fixture outdoors be sure to **ONLY** use the Elation cables that have been manufactured to meet the IP rating.

“First” DMX Cables - Special DMX “First” cables may be purchased from Elation to provide a means of data communication with standard DMX fixtures for indoor use. These cables will come with the IP rated twist lock connector on one end and either a 3-pin XLR male or female connector on the other depending on model. Be sure to only use these cables for intergrading this fixture in a standard DMX chain.

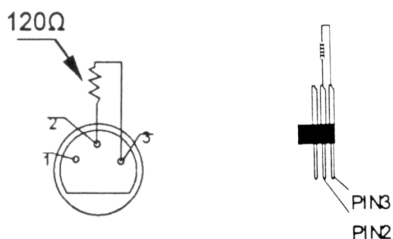
“First” Power Cable – A special power “First” cable is included with every fixture. This cables is used to provide power to your fixture. This cable comes with the IP rated twist lock connector on one end and a standard Edison 3-prong, grounded prong on the other end. Be sure to only use this cable for power distribution and never attempt to connect this cable to the DMX lines.

You can chain multiple fixtures together through serial linking. Using the IP rated signal cables provided through Elation. Always be sure to daisy-chain your in and out data connections, never split or “Y” your DMX connections unless you are using an approved DMX splitter such as the Elation Opto Branch 4™ or DMX Branch/4™.



DMX-512 connection with DMX terminator

A DMX terminator should be used in all DMX lines especially in longer runs. The use of a terminator may avoid erratic behavior in your DMX line. A terminator is a 120 ohm 1/4 watt resistor that is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This fixture is inserted in the female XLR connector of the last fixture in your daisy chain to terminate the line. Using a *line terminator (Elation part: DMX T PACK)* will decrease the possibilities of erratic behavior.



Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

5-Pin XLR DMX Connectors. Some manufactures use 5-pin XLR connectors for DATA transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used, these adaptors are readily available at most electric stores. The following chart details a proper cable conversion.

3-Pin XLR to 5-Pin XLR Conversion		
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)
Ground/Shield	Pin 1	Pin 1
Data Compliment (- signal)	Pin 2	Pin 2
Data True (+ signal)	Pin 3	Pin 3
Not Used		Pin 4 - Do Not Use
Not Used		Pin 5 - Do Not Use

Fixture DMX addressing;

All fixtures should be given a DMX starting address when using a DMX controller, so the correct fixture responds to the correct control signal. This digital starting address is the channel number from which the fixture starts to “listen” to the digital control information sent out from the DMX controller. The allocation of this starting DMX address is achieved by setting the correct DMX address on the digital display located on the back of the fixture.

You can set the same starting address for all fixtures or a group of fixtures, or set different address for each individual fixture. Be advised that setting all you fixtures to the same DMX address will subsequently control all fixtures in the same fashion, in other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set each fixture to a different DMX address, each unit will start to “listen” to the channel number you have set, based on the quantity of control channels (DMX channels) of each fixture. That means changing the settings of one channel will only affect the selected fixture.

In the case of the ELAR 216 Panel™, which is up to a nine channel fixture, you should set the starting DMX address of the first unit to 1, the second unit to 10 (9 + 1), the third unit to 19 (9 + 10), and so on.

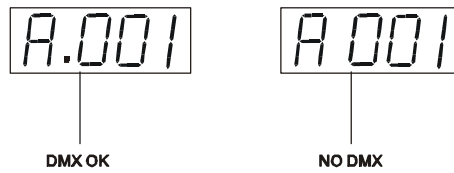
Note: During start-up the ELAR 216 Panel™ will automatically detect whether a DMX data signal is being received or not. If a DMX data signal is being received, the display will show "**A.XXX**" (**XXX** representing the actual DMX address). If the fixture is not receiving a DMX signal the display will flash "**A.XXX**" (**XXX** representing the actual DMX address).

If your fixture is connected to a DMX controller and the display is flashing (not receiving a DMX signal), please check the following:

- The 3-pin or 5-pin XLR plug (cable with DMX signal from controller) may not be connected or is not inserted completely into the DMX input jack.
- The DMX controller is switched off or defective.
- The DMX cable from the controller merging with included IP Rated Cable adapter is not connected securely
- The DMX cable or connector is defective.
- A DMX terminator has been inserted into the last fixture in your DMX chain.

8. DISPLAY LED INDICATOR.

The ELAR 216 Panel™ has a LED indicator on the display. This indicator is designed to give a quick visual indication of the fixtures' DMX status. The illustration below details the functionality of the LED indicators.



The LED indicator represents DMX signal:

- If the indicator is on, a clean DMX signal is present
- If the indicator is off, there is no DMX signal present

9. DISPLAY MENU

Default settings shaded.

Function Mode	Set DMX Address Value Display Set To Slave Auto Program	A001~AXXX Slave1, Slave2, Slave3 Master / Alone		DMX address setting DMX value display Slave setting Auto program
Information	Time Information	Current Time	XXXX (Hours)	Power on running time
		Total Life Hours	XXXX (Hours)	Total Fixture Hours
		Last Run Hours	XXXX (Hours)	Resettable Hour Clock
		Timer Password	Password= "038"	Reset Password
		Clear Last Run	ON/OFF	Clear Fixture Last time
	Temperature Info	Head Temperature	XXX°C/°F	Temperature in the head
	Software Version	Ver1.0.....		Software version of each IC
Personality	Status Settings	Address via DMX	ON/OFF	Remote DMX Addressing
		No DMX Status	Close/Hold/Auto	Auto run if no DMX
	Display Setting	Shutoff Time		Display shutoff time
	Temperature C/F	Celsius Fahrenheit		Temperature switch between °C/°F
	Reset Default	ON/OFF		Restore factory sett.
Effect Adjust	Manual Control	RED GREEN BLUE WHITE AMBER COLOR TEMPERATURE COLOR MACROS AUTO PROGRAM STROBE DIMMER	R XXX (000~255) G XXX (000~255) B XXX (000~255) W XXX (000~255) A XXX (000~255) C XXX (000~255) T XXX (000~255) M XXX (000~255) P XXX (000~255) S XXX (000~255) D XXX (000~255)	Manual adjust intensity
Users Mode Set	User Mode	4CH User Mode 5CH User Mode 7CH User Mode 9CH User Mode		DMX Channel Mode Selection
Edit Program	Select Programs	Auto Pro Part 1 Auto Pro Part 2 Auto Pro Part 3	Program 1 ~ 10 Program 1 ~ 10 Program 1 ~ 10	Built-In Programs Selection and Edit Functions
			Program 1 Program 2 Program 3	

Edit Program	Program 1 : Program 10	Program Test Step 01=SCxxx Step 64=SCxxx	("STEP XX")	Testing program Program in loop Save and exit
Edit Scenes	Edit Scene 001 ~ Edit Scene 250	Red,..... --Secne Time-- Input By Outside	Red=xxx..... TIME=xx.xs	Save and automatically return manual scenes edit
Rec. Controller	XX~XX			Scenes via External DMX Controller

Remarks:

- 1) If the fixture does not receive a DMX signal the menu display will flash repeatedly.

9.1 Function Mode:

“Set DMX Address” - DMX address setting – This function is used to set or adjust the fixture’s starting DMX address. Every device controlled by DMX has to have a unique starting address. The addressing feature is what allows DMX to function properly. The DMX address of a fixture is what allows it to communicate with a controller properly. The DMX addressing also allows the fixture to ignore any DMX information coming from the controller that is not meant specifically the fixture. Because each fixture is connected in a daisy-chain fashion it is imperative to assign a proper and unique starting DMX address to each and every fixture. The DMX address is non-destructive and will remain in the fixture’s memory even when the power to the unit is switched off. Memory is backed-up and retain by an internal power source that should last about five years. For proper DMX addressing see Section 10/Page 35 of this user manual.

“Value Display” - Display the DMX 512 value of each channel

With this function you can display the DMX 512 value of each channel. The display will automatically detail the changing DMX values as they are received from the controller.

“Set To Slave” - Slave setting for Master/Slave Operation

With this function, you can define the device as slave for operation in Master/Slave mode. Each slave setting will have a different function for a dynamic lightshow

without a controller.

“Auto Program” – Auto Program Mode

This function allows the internal programs to run in either stand-alone or master/salve mode. In “Master” mode the fixture will send command data to all other fixtures connect via the DMX chain. In “Alone” mode the fixture will operate as a single fixture. The program for this mode is selected in the **“Select program”** section of the control menu. You can set the number of steps under **“Edit program”**. You can edit the individual scenes under **“Edit scenes”**. With this function, you can run the individual scenes either automatically, i.e. with the adjusted Step-Time.

9.2 Information:

Time information

These functions will detail different time functions associated with the fixture.

Current Time

This function displays the running time of the fixture from the last power on. The display shows “XXXX”, where “XXXX” represents the number of hours the fixture has been running. This counter is automatically reset after every power-on.

Total Life Hours

This function tracks the total running time of the fixture from the very first start-up. Where “XXXX” represents the total number of running hours. This time is none destructive and will remain in the fixtures memory indefinitely.

Last Run Hours

This function is user resettable and can be used to track hours for a specific amount of time. The setting can be reset at any time.

Timer Password

This command will reset the “Last Run Hours” described above. Enter the password to reset the timer to zero. The Access code to reset the timer data is “038.”

Clear Last Run

This function resets the lamp “ON” time to zero. Please reset the lamp “ON” time at every lamp replacement. This procedure tracks the lamp running time so the lamp can be replaced at the end of it’s recommended duty cycle.

- Select “**Clear lamp time**” in the system menu.
- The LCD will display “ON” or “OFF.” Were “ON” will reset the lamp time.
- Press enter to confirm.
- Press the Mode/Esc-button to return to the main menu.

Temperature Info.

This function will display the internal head temperature of the fixture in real time. This setting can be selected to readout temperatures in either Celsius or Fahrenheit.

Software version

This function will display the current operating software version of the fixture.

- The LCD will read “V-X.X”, “X.X” represents the version number, e.g. “V-1.0”, “V-2.6”.
- Use the UP and DOWN buttons to toggle through the software version of different IC’s.

9.3 Personality:

Status setting

Address via DMX - This function allows the DMX address to remotely be adjusted from a DMX console. This setting requires special settings for both the controller and the fixture. RDMX is on by default. For operational instructions please see Section 10/Page 33 of this manual “Remote DMX addressing.”

No DMX Status – This function dictates how the fixture will function if it loses DMX signal during normal operation. The default function is set to hold, in which the fixture will lock into the last DMX signal it received and remain in that position until it is turned off or begins receiving a new DMX signal. If the fixture is turned on

without any DMX signal, the fixture will automatically go in to sound-active mode. Available settings are: “Close” – Shutter flags will close. “Hold” – Fixture will remain at it’s last settings. “Auto” – Fixture will go into stand-alone mode, running the built-in program. “Music” – The fixture will go into sound-active mode.

Display Settings – The display is designed to turn off during normal operation to avoid excessive light in situations that require an extremely dark environment. This function will adjust the time delay the fixture will before it turns off. This function is active as default.

Temperature C/F – This function changes the temperature the unit will display from either Celsius or Fahrenheit. Celsius is set as default.

Reset Default – This function is used to restore the factory settings of the device. All settings will be set back to the default values (shaded). Any edited scenes will be lost.

9.4 Effect Adjust:

Manual Control– Manual Fixture Settings:

This function allows each of the nine DMX channels to be controlled manually. This will allow the fixture to be preset to a specific color or built-in program without the use of a DMX console. All manual settings will return to zero once power has been turned off. To retain manual settings be sure to assign setting to one of the built-in programs, see “Working with Built-In Programs Section/Page for detailed instructions on this procedure.

9.5 User Mode Set:

User Mode – DMX Channel Mode Selection:

This function selects the different DMX channel modes. The fixture can be set to run in four different modes, 4 channel, 5 channel, 7 channel, and 9 channel. See DMX Traits, Section/Page for details on the different DMX Modes.

9.6 “Edit” Internal Program Settings:

The fixture comes equipped with a built-in DMX recorder that allows custom programs to be installed and recalled directly from the fixture’s control board. Programs can be created and stored using the fixture’s control board or by using an external DMX controller. For detailed instructions on how to complete this task please see “Working with Built-In Programs” Section 12/ Page 31.

Select program – This function allows the user to select one of ten of the user defined built-in programs. This program is then accessed in “Function Mode” under “Program Run.”

Edit program – This function allows the user to edit the built-in programs.

Edit Scenes – This function allows the user to edit or define the actual scenes that are stored in the user defined built-in programs that are accessed in the previous step.

10. DMX ADDRESSING

Setting the DMX address - After the fixture is turned “ON” it will immediately complete a reset process that test all the fixture’s functions. When the reset process concludes the LCD will display the fixture’s current DMX address. If the fixture is not receiving a DMX signal, the display will flash continuously. To set or adjust a DMX address, please follow the procedure below:

1. Toggle through the menu by pressing the Up and Down buttons until the display reads “Addr=XXX.” Tap the enter button to make changes to the address.
2. While the display is flashing use the “UP” and “DOWN” buttons to select a new address. Once the new address has been selected, lock the new address into the fixture’s memory by pressing the “ENTER” button.

The DMX address is non-volatile and will remain in the fixture’s memory even when the power to the unit is switched off. Memory is backed-up and retain by an internal power source that should last about five years

Remote DMX addressing (RDMX) / Address Via DMX- This function allows the DMX address to be changed remotely from a DMX console. This setting requires special settings for both the controller and the fixture. This function may be turned on and off, and is “ON” be default. Follow the procedure listed below to access the RDMX functions:

Fixture Settings:

1. Access the main menu and use the UP or DOWN to get to the “Personality” menu, then press ENTER
2. Once in the “Personalities” menu, tap the UP or Down to get to the “Status Settings “ menu, press ENTER.
3. Once in the “Status Settings” tap the UP or Down to get to the “Address via DMX” function and press ENTER.
4. “Address via DMX” is the function that turn the RDMX function on and off. Press ENTER and be sure the function is turned on.
5. Press the UP button to display “ON” to activate this function, or “OFF” to deactivate this function.

6. Press ENTER to confirm.
7. Press MODE/ESC to return to the main menu.

Controller Settings:

1. Set the DMX value of channel 1 to a value of 7.
2. Set the DMX value of channel 2 to a value of 7 or 8. When channel 2 is set to "7" you can adjust the starting address between 1 and 255. When set to "8" you can adjust the starting address between 256 and 511.
3. Use channel 3 to set your desired DMX starting address. **For example:** If you want to set the starting address to 57, set channel 1 to a value of "7," set channel 2 to a value of "7" and use channel 3 to set your address to 57 by selecting a channel value of 57. Example 2: If you want to set the starting address to 420, set channel 1 to a value of "7," channel 2 to "8" and channel 3 to "164" (256+164=420).
4. **Wait for approximately 20 seconds for the unit to complete the address reset function.**

11. DMX TRAITS

DMX Operation Notes:

The fixture will function in DMX mode whenever the unit is receiving a DMX signal. Please note that this will override all manual settings.

This unit will keep and retain the last DMX command in the event of DMX signal failure. To reset the fixture you must turn the power off.

DMX CHANNEL TRAITS

The chart below and on the preceding pages outlines the different DMX traits for the four different DMX modes.

DMX Channel Functions and Values					
Mode/Channel				Value	Function
5CH	6CH	8CH	10CH		
1	1	1	1		<u>Red LED:</u>
				0-255	Red (0-OFF, 255-100% Red)
2	2	2	2		<u>Green LED:</u>
				0-255	Green (0-OFF, 255-100% Green)
3	3	3	3		<u>Blue LED:</u>
				0-255	Blue (0-OFF, 255-100% Blue)
4	4	4	4		<u>White LED:</u>
				0-255	White (0-OFF, 255-100% White)
NA	NA	5	5		<u>Color Temperature:</u>
				0	No function
				1-255	Color Temperature (2700K-7200K)
NA	NA	6	6		<u>Color macros:</u>
				0	No function
				1-7	Bastard Amber
				8-15	Medium Amber
				16-23	Pale Amber
				24-31	Gallo Gold
				32-39	Golden Amber
				40-47	Light Red
				48-55	Medium Red
				56-63	Medium Pink

				64-71	Broadway Pink
				72-79	Follies Pink
				80-87	Light Lavender
				88-95	Medium Lavender
				96-103	Lavender
				104-111	Indigo
				112-119	Hensley Blue
				120-127	Tipton Blue
				128-135	Light Steel Blue
				136-143	Light Sky Blue
				144-151	Sky Blue
				152-159	Brilliant Blue
				160-167	Light Aqua
				168-175	Brilliant Blue
				176-183	Primary Blue
				184-191	Congo Blue
				192-199	Pale Yellow Gold
				200-207	Moss Green
				208-215	Primary Green
				216-223	Double CTB
				224-231	CTB
				232-239	½ CTB
				240-247	Dark Blue
				248-255	White
					<u>Internal programs:</u>
				0-10	No Function
				11-40	Internal program 1
				41-70	Internal program 2
				71-100	Internal program 3
				101-130	Internal program 4
				131-160	Internal program 5
				161-190	Internal program 6
				191-220	Internal program 7
				221-255	Gradient effect
					<u>Shutter, strobe:</u>
				0-31	Shutter Closed (All LEDs Off)
				32-63	Shutter Open (LEDs may be used)
				64-95	Strobe effect slow to fast
				96-127	Shutter Open (LEDs may be used)
				128-159	Pulse-effect in sequences
				160-191	Shutter Open (LEDs may be used)
NA	NA	NA	7		
NA	NA	NA	8		

				192-223	Random strobe effect slow to fast
				224-255	Shutter Open (LEDs may be used)
NA	5	7	9		General dimming/speed:
				0-255	Dimming (0 - LEDs Off, 255 - 100%)
					Speed from slow to fast /when running internal programs
					Speed from slow to fast when running gradient effect

12. WORKING WITH BUILT-IN PROGRAMS

The fixture comes equipped with a built-in DMX recorder that allows custom programs to be installed and recalled directly from the fixture's control board. Programs can be created and stored using the fixture's control board or by using an external DMX controller. The following instructions will detail the procedures for using the on-board system menu as well as using a DMX compliant controller.



Memory Statistics:

Quick Access Programs (Program Part): 3

Total Number of Programs: 10

Maximum Number of Steps (Scenes) per a Program: 64

Total Number of Scenes (Steps): 250

Step 1 – Building Scenes.

The control will store a maximum of 250 scenes. These scenes are then used to create the programs. A program can store one or a maximum of 64 scenes. Keep in mind that a scene can only be accessed when it is stored in a "Program." If you wish to build a static scene (a scene consisting of no movement) for a logo or gobo projection, the scene must be stored inside a program. To build a scene follow the instructions below:

- Access the main menu and toggle to "Edit Programs" which is menu function 8.
- Then tap the "ENTER" button and toggle to "Edit Scenes," menu function 8-3.
- When you get to the "Edit Scenes" function tap the "ENTER" button. The screen will then change to Edit Scene 001, this will be menu function 8-3-1. You can then press the "ENTER" button to begin to edit scene 1 or use the "UP" and "DOWN" buttons to toggle to access scenes 2-250.
- Once in the scene edit screen you have access to the functions listed below. Tapping the "ENTER" button will instantly allow you to change the values of the selected function in real time. The values can be adjusted from 0~250. Once you achieved your desired value tap the "ENTER" button once again to automatically

lock the value into the scenes memory. You can repeat the procedure for all functions listed below:

- “Auto Program” – Allows access to all of the fixture’s DMX traits.
- “Red” – adjust all of the red LED values
- “Green” – adjust all of the green LED values
- “Blue” – adjust all of the blue LED values
- “White” – adjust all of the white LED values
- “Strobe” – adjust the strobe
- “Dimmer” – adjust the dimmer intensity
- “Scene Time” – set the hold time for the scene
- “Input By Out” – this function will store a scene from an external DMX console. See the next section for scene editing via an external DMX controller.

Step 1B – Building Scenes from an External DMX Controller

The fixture includes a simple built-in DMX recorder. This recorder allows you to build a scene using your own DMX console. That scene can then be sent to the fixture and be stored inside one of the fixture’s scene storage banks. Many people may find this procedure easier and quicker than using the on board menu functions as in “Step 1.” To store a scene from an external DMX controller follow the procedures below:

- Using your DMX control build and store scenes as you normally would.
- Once you have built all your required scenes, enter the fixtures main menu and toggle to

Step 2 – Editing Programs.

The control will store a maximum of 10 programs. A program can store one or a maximum of 64 scenes. Keep in mind that a scene can only be access when it is stored inside one of the 10 available programs. Follow the procedure below to build an internal program:

- Access the main menu and toggle to “Edit Programs” which is menu function 8.
- Then tap the “ENTER” button and toggle to “Program 1” menu function 8-2-1.
- When you get to the “Program 1” function tap the “ENTER” button. The screen will then change to Edit Steps 01, this will be menu function 8-2-1-1. Use the “UP” and

“DOWN” buttons to toggle through the scenes created in “Step 1.” Press the “ENTER” button to add a scene to the program. Tapping the “Enter” button will automatically lock the selected scene into the programs’ memory. Repeat the process until all the desired scenes have been added to the program. Each program can store a maximum of 64 scenes.

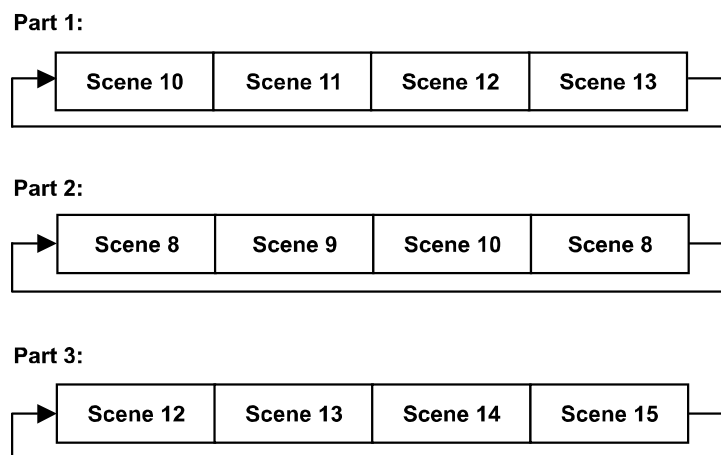
- To test the program access “Program Test” in the “Program Edit” menu function.

Step 3 – Playing a Program

To initiate a program follow the procedure below:

- Access the main menu and use the “Up” and “Down” to toggle to “Function Mode” and tap the “Enter” button.
- In the next screen select “Auto Program” and tap the “Enter” button.
- There are now two selections, “Master” and “Alone.” Select “Master” when running multiple fixtures in a master/slave configuration. See section 10.2 “Master/ Slave Operation” on page 33 for proper set-up instructions. Select “Alone” when running a single fixture or when multiple fixtures in stand-alone mode. See section 10.1 “Stand-Alone Operation” on page 32 for proper set-up instructions.

The 3 Slave groups run the Auto Program in certain time segments, as shown in the following diagram:



13. CLEANING AND MAINTENANCE

Consider the following points during normal service and inspection:

1. Be sure all screws and fasteners are securely tightened at all times. Lose screws may fall out during normal operation resulting in damage or injury as larger parts could fall.
2. Electric power supply cables must not show any damage, material fatigue or sediments. Never remove the ground prong from the power cable.

Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.



CAUTION!

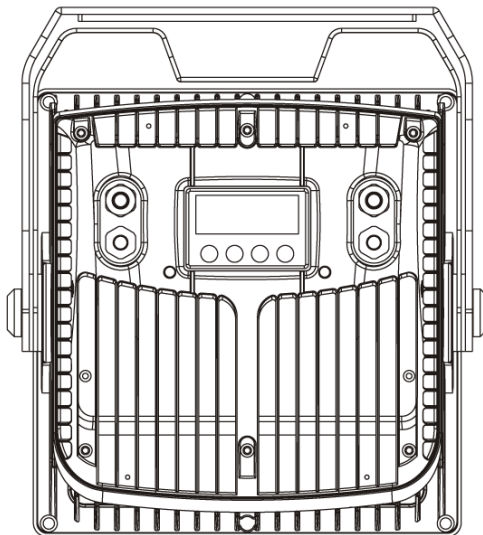
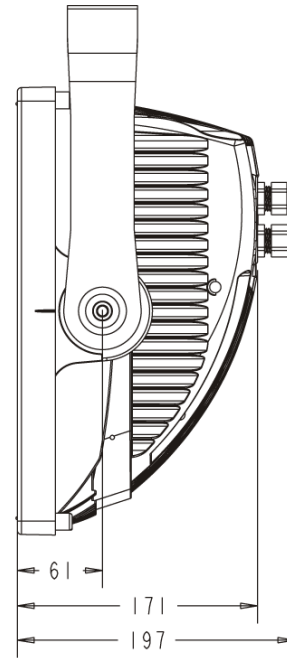
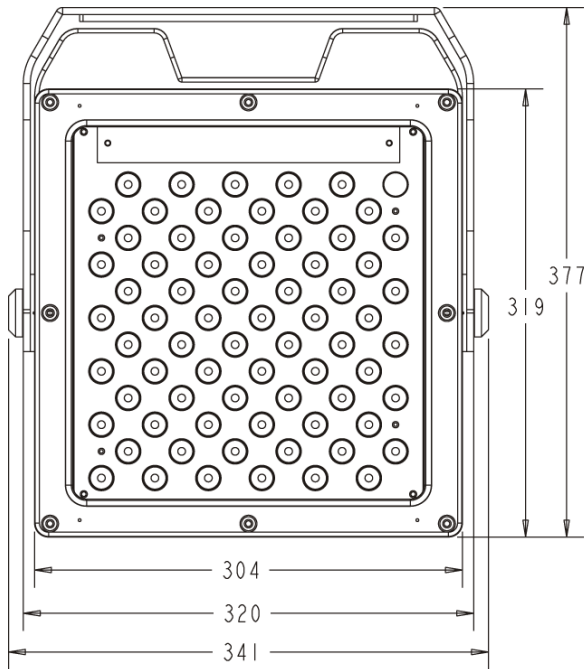
Disconnect from mains before starting maintenance operation.

We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents.

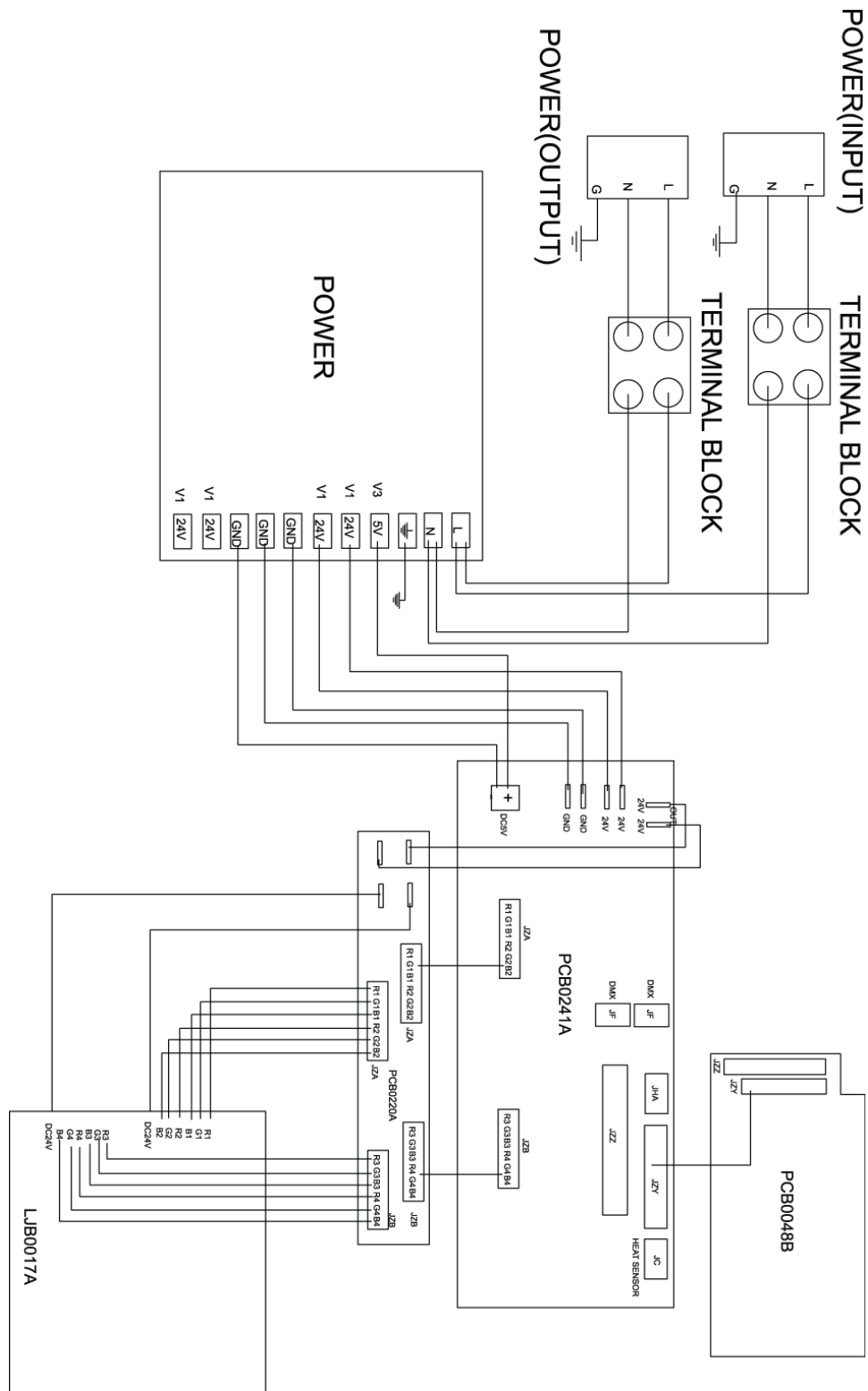
There are no user serviceable parts inside this fixture, please refer all other service issues to an authorized Elation service technician.

Should you need any spare parts, please order genuine parts from your local dealer.

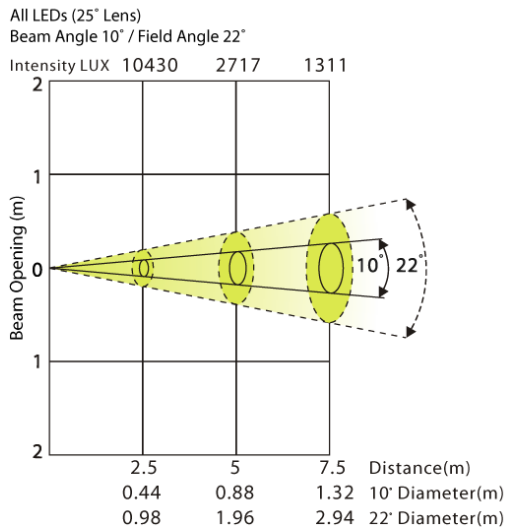
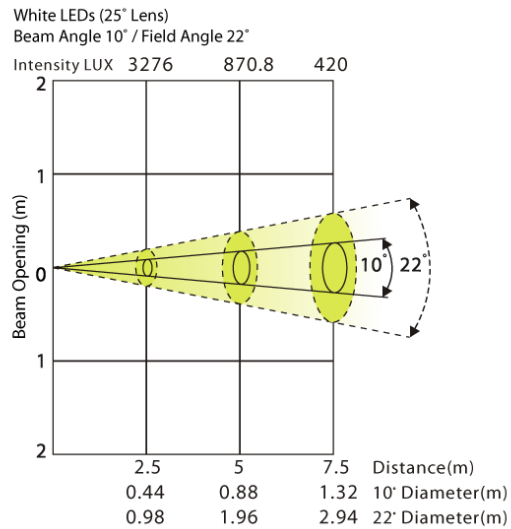
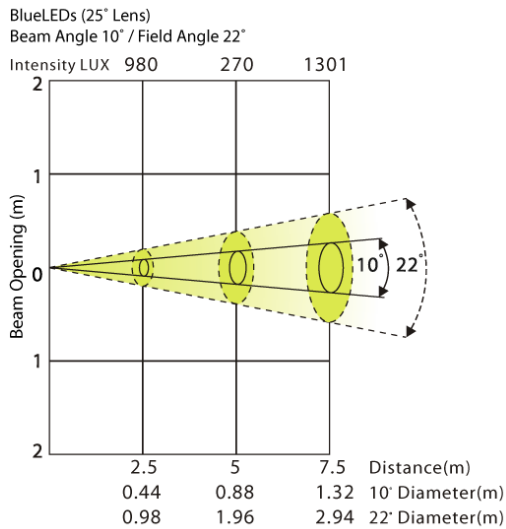
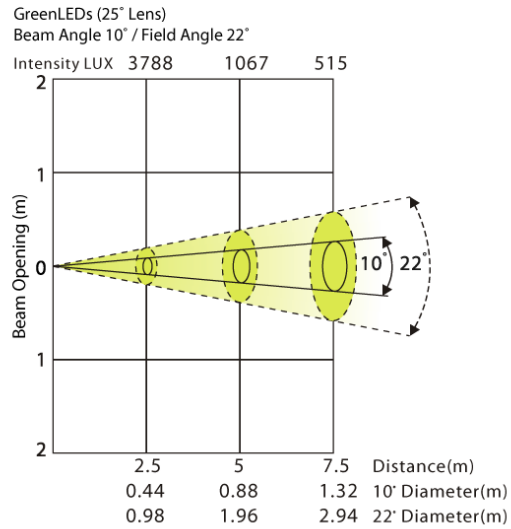
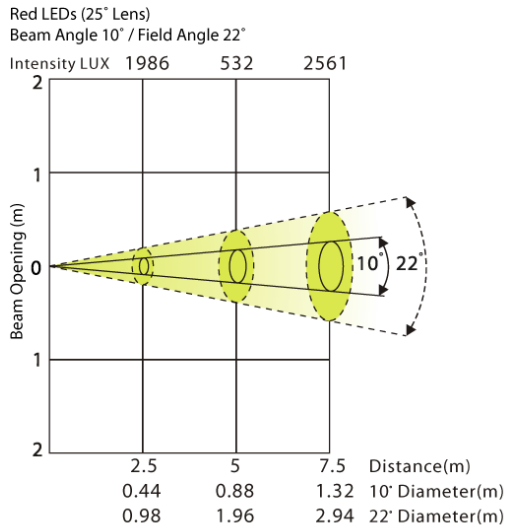
14. DIMENSIONAL DRAWINGS



15. CIRCUIT SCHEMATIC



16. PHOTOMETRIC DATA



Elation Professional
ELAR 216 Panel
Photometric Data



16. 2-YEAR LIMITED WARRANTY

A. Elation Professional® hereby warrants, to the original purchaser, Elation Professional® products to be free of manufacturing defects in material and workmanship for a period of two years, (730 days) from the date of purchase. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.

B. For warranty service, send the product only to the Elation Professional® factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation Professional® will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, Elation Professional® shall have no liability what so ever for loss of or damage to any such accessories, nor for the safe return thereof.

C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which Elation Professional® concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Elation Professional® factory unless prior written authorization was issued to purchaser by Elation Professional®; if the product is damaged because not properly maintained as set forth in the instruction manual.

D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check-up. During the period specified above, Elation Professional® will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Elation Professional® under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation Professional®. All products covered by this warranty were manufactured after January 1, 1990, and bare identifying marks to that

effect.

E. Elation Professional® reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation Professional® in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Elation Professional® be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

G. This warranty is the only written warranty applicable to Elation Professional® Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

17. TECHNICAL SPECIFICATIONS

<i>Power supply:</i>	<i>100v~240v / 50Hz~60Hz AC</i>
<i>Power consumption:</i>	<i>Maximum250w</i>
<i>LED Configuration:</i>	<i>72 x 3 Watt (18 x Red, 18 x Green, 18 x Blue, 18 x White)</i>
<i>IP Rating:</i>	<i>IP65</i>
<i>DMX Channels:</i>	<i>4, 5, 7, or 9 Channel mode</i>
<i>DMX Drive:</i>	<i>Standard DMX-512, 5 pole IP Rated Locking Connector; [+] = Pin 3 [-] = Pin 2 [Ground] = Pin 1.</i>
<i>Color Mixing:</i>	<i>RGBW Color Additive Mixing</i>
<i>Beam Angle:</i>	<i>10°</i>
<i>Field Angle:</i>	<i>22°</i>
<i>Dimmer:</i>	<i>Continuous Dimming 0~100%</i>
<i>Strobe:</i>	<i>Electronic Strobe 0~25 Fps</i>
<i>Lamp Life:</i>	<i>100,000 Hours Rated Life</i>
<i>Operating Temperature:</i>	<i>-25°C ~ 45°C</i>
<i>Max Ambient Temperature:</i>	<i>113°F/45°C</i>
<i>Listing:</i>	<i>(cETLus pending)</i>
<i>Weight:</i>	<i>12 Kgs / 26.5Lbs</i>
<i>Dimensions:</i>	<i>(232 x 220 x 260) mm 9.13" x 8.66" 10.24"</i>

Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

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